

**Advanced Manufacturing Career Cluster
Resource List**

Resource	Author / Publisher	Location	Notes
Advanced Manufacturing Portal	US Government, NASA, NSF	http://www.manufacturing.gov/advanced_manufacturing.html	This is a source for news and information on advanced manufacturing programs and related activities underway in federal agencies and with science and technology missions. The news briefs can also be used to help students conduct research.
CTE Online	Center for the Advancement of Digital Resources in Education	http://www.cteonline.org/portal/default/default	CTE Online is a single destination for model curriculum, resources, tools and community. Search curriculum by keywords.
Digital Electronics (2011)	Robert Dueck & Ken Reid	http://www.amazon.com/Digital-Electronics-Robert-Dueck/dp/1439060002	Digital Electronics (2011) is a textbook that would be a good supplement to the Digital Electronics course in the Technology program of study. The ISBN is 978-1439060001.
Free Studio	Free Studio	http://www.dvdvideosoft.com/	This software can be used to download YouTube videos from the internet. This is useful for teachers at schools that block YouTube viewing.
How Everyday Things are Made	Alliance for Innovative Manufacturing (AIM) at Stanford University	http://manufacturing.stanford.edu/hetm.html	This site has over 4 hours of video footage showing how commonly used things are made (manufactured). The site is based on a continuing studies course at Stanford and taught by Dr. Mark Martin.
Introduction to Mechatronics and Measurement Systems	Dr. David Alciatore	http://mechatronics.colostate.edu/	
Lean Education Academic Network	Ohio State University Fisher College of Business	http://teachinglean.org/	Contributors share resources for teaching LEAN, as well as insights related to lean thinking and helping introduce these concepts to the classroom.

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Links to Information	San Jose State University - College of Engineering	http://www.engr.sjsu.edu/bifurman/courses/ME106/other/mechatronicslinks.htm	
MAKE Magazine	Maker Media	http://makezine.com/	
Maker Faire	Maker Media	http://makerfaire.com/	
Maker Movement Resources	We Are Teachers Blog	http://www.weareteachers.com/community/blogs/weareteachersblog/blog-wat/2013/03/13/the-teacher-report-joining-the-maker-movement	
Manufacturing & Engineering Technologies Education Clearinghouse (METEC)	National Center for Manufacturing Education	http://meteconline.org/	Clearinghouse of manufacturing and engineering technologies education classroom materials, events, videos, links and more.
Manufacturing Institute	Manufacturing Institute and National Association of Manufacturers	http://www.themanufacturinginstitute.org/	A source for facts and reports regarding manufacturing. For example, skills gap data in manufacturing and the Public Perception of Manufacturing report.
Manufacturing is Cool	Society of Manufacturing Engineers	www.manufacturingisCool.com	A good source for secondary students to learn about manufacturing engineering careers, summer programs, and how to prepare for careers in manufacturing.

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Manufacturing Day	Fabricators and Manufacturers Association	http://www.mfgday.com/resources	This web site provides information about Manufacturing Day which is supported by a group of industry sponsors to address common misperceptions about manufacturing and connect with future generations to address the skilled labor shortage in the manufacturing industry. This site includes information how to get schools involved, manufacturing news, education resources, and contact information.
Manufacturing Technology Lesson Plans	Utah Education Network	http://www.uen.org/Lessonplan/preview.cgi?LPid=16536	This site provides lesson planning ideas for manufacturing courses.
Mechatronic Tutorial Information	San Jose State University, College of Engineering	http://www.engr.sjsu.edu/bjfurman/courses/ME106/mechatronicstutorials.htm	
Mechatronics Resources	Colorado State University	http://www.mechatronics.colostate.edu/resources.html	This site provides supplemental resources related to different topics taught in a mechatronics course (e.g., actuators, electronics, and digital signal processors). In addition, this site lists several reference books and journals for students to use in conducting research.

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mycareerme	Society of Manufacturing Engineers Education Foundation, National Science Foundation, National Center for Manufacturing Education	www.CareerME.org	A social networking site where advanced manufacturing students, teachers, and industry professionals can connect and collaborate
National Association of Manufacturers	National Association of Manufacturers (NAM)	http://www.nam.org/	A source for statistics and data, "Cool Stuff Being Made" video series, news, publications, speeches, and presentations.
National Center for Manufacturing Education	Sinclair Community College, National Science Foundation, Advanced Technological Education (ATE) Centers	http://www.ncmeresource.org/ncme_sites.php	Information for workshop opportunities for faculty and professional development. Lists manufacturing education resources and sites.
National Council for Advanced Manufacturing	National Council for Advanced Manufacturing (NACFAM)	http://www.nacfam.org/	A source for information related to sustainable manufacturing, workforce development, technology & innovation, as well as NACFAM news and events.
National Science Digital Library	UCAR Community Programs and National Science Foundation	http://nsdl.org/	
Research and Education in Mechatronics	Network on Research and Education in Mechatronics	http://mechatronics-net.de/	

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Siemens Mechatronics Systems Certification	Siemens	http://www.siemens-certifications.com/content/0/6/7/5903/	Provides information related to mechatronics such as the teaching and learning model “Systems Approach” and videos for mechatronic systems training.
SME Education Foundation	Society of Manufacturing Engineers	www.smeef.org	Provides outreach programs to enrich students to study STEM in preparation for careers in advanced manufacturing. Programs include: PRIME, National Robotics Challenge, Shop Rate Foundation, The Edge Factor, and the Tradesmen: Making an Art of Work.
SME Manufacturing Knowledge Base Wiki	Society of Manufacturing Engineers	http://www.sme.org/mfgknowledgebase/	Provides a conduit to participate in content development that is relevant to the manufacturing industry. Moreover, it connects manufacturing content experts to share, discuss, and contribute knowledge.
Society of Manufacturing Engineers	Society of Manufacturing Engineers	www.sme.org	A source of events, training and development, education and careers, knowledge, and publications, all related to manufacturing.
ToolingU	Society of Manufacturing Engineers	www.toolingu.com	Provides sources such as curriculum, online classes, assessments, certifications, digital books and videos.